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THE DUALISTIC CONCEPTION OF NATURE.

IN one form or another, monism is a necessary concept of science.

For scientific research is essentially the effort of human intelligence to bring all facts into intelligible connexion with one another ; and that object can be attained only when all facts are comprehended as parts of *one* intelligible system. The unity of nature therefore is implicitly assumed at the very dawn of scientific intelligence, and it becomes an explicit concept as the work of science gains in perspicuity. Accordingly, on first reflexion it must appear somewhat startling, that this monistic assumption of science should, from a very early period, have been traversed by an illusion of dualism ; and in the interests of science itself, not to speak of the general interests of humanity, it becomes important to trace this illusion to its source, and to point out the injurious influence it has exerted upon human life in practical as well as in speculative activity.

The conception itself of nature involves the conception of its unity. The term *natura* expresses admirably, because literally, that eternal process of birth, to which it has come to be applied. By its grammatical structure in fact it conveys the idea more pointedly than *φύσις*, which it was used by the Romans to translate. Of neither word does there appear to be a philological history of any value for the history of scientific ideas. The use of *φύσις* goes as far back as the Homeric poems. In *Od.* x. 303, the word is used to denote the “ nature ” of the mythical herb *moly*, which Hermes gives to Odysseus as a counter-charm against the spells of Kirkê. The force of the word here is indicated by the fact, that a few lines before (vs. 288) the word *ὑράτος* is used as an equivalent to denote the “ power ” of the herb.

In this use of *φύσις* there is already implied the idea of some quality in a thing that makes it what it is, and cannot therefore be altered without the thing ceasing to be. In other words, the *nature* of things is conceived to be determined by the very power which makes them what they are, and thus to be independent of human will. Accordingly those phenomena, which are products of nature, come to be contrasted as unalterable with those which, being products of man, can be altered or abolished at any time by his efforts. This contrast had already become a familiar commonplace to the Athenians in the second half of the fifth century B. C., as a result of the primitive philosophical movements of the preceding century. In the speculations of Sophist and Socratic alike the antithesis is quite marked between *φύσις* on the one hand, and *νόμος* or *Σέστις* or *τέχνη* on the other. In fact the great problem of that period was to find out whether the principles of man's moral life are based upon distinctions in nature, or are merely regulations of human enactment, institutions of human society, artifices of human ingenuity.

But along with this idea of nature being unalterable there runs the idea of its unity. The one fact indeed is made the corollary of the other. The essential nature of things is conceived to be unchangeable just because all their phenomenal changes are supposed to be temporary modifications of some principle which remains for ever the same. To find this principle was, from the outset, the problem of all scientific inquiry. In the language of early Ionic thought this principle came to be spoken of as *ἀρχή*, at least from the time of Anaximander who is said to have first used the term in its philosophical signification.

Among the Ionics monism was thus implicitly assumed. But it became an explicit feature of speculative thought among the Pythagoreans, who may thus be regarded as the first true monists. The monad indeed became with them *the ἀρχή* of all things, and that in a far more rigid sense than with Leibnitz. For the Pythagorean monad is really nothing but the abstract idea of unity,—the abstract unity whose repetition constitutes all number, and constitutes thus also the very essence of all things.

But the Pythagoreans evidently felt the perplexity of the problem which this rigid monism imposed upon human thought. "How can the whole of things be for us a unity, and yet each separate?" *Πῶς δέ μοι ἔν τι τὰ πάντα ἔσται, καὶ χωρὶς ἐκαστον;* is a question which the Orphic poems, though spurious, yet with a certain historic truth, represent as being forced upon human intelligence at the very dawn of reflective thought. In the effort to solve this problem the monism of the Pythagoreans collapsed into a fateful phase of dualism. Among numbers they detected two forms, even and odd; and recognising number as the essential constituent of all things, they were forced to find the same duality throughout the universe. With a curious, at times even pathetic, illustration of the limitations of human intelligence, they followed this dualistic idea into fantastic analogies of odd and even with male and female, right and left, good and evil, etc.,—mere conceits which have long ago lost all meaning and interest. But it is only fair to this old school of thinkers to bear in mind the incalculable service which they rendered to primitive science by their essentially monistic conception of nature. It was they who laid the first foundations of exact science by their efforts, fanciful though they were at times, to trace throughout the universe proportions calculable in definite numbers. They also, alone among ancient thinkers, rose above the sensible appearance of stellar movements, and conceived the earth as merely one of the planets revolving round a central point. It was in fact a fragment of the Pythagorean Philolaos, that suggested to Copernicus the heliocentric explanation of celestial phenomena. It remains, in fine, a significant fact, that the word *νόσμος*—the general Greek term for any orderly arrangement—was first applied by the Pythagoreans in the use which almost displaced its primitive meaning, to denote the universe of things *διά τῆς ἐν αὐτῷ τάξεως*.¹

Dualism therefore is, at worst, merely an unessential feature of the Pythagorean philosophy, and its influence is practically neutralised by the intrinsic monism of the system. But this is not the case, or at least by no means so completely, in the Eleatic philoso-

¹ Plutarch, *De Plac. Phil.*, II., 1.

phy. Here appears, for the first time, in rugged prominence, the most obtrusive dualism of popular thought and of science. The first discovery of common reflexion, as well as of scientific inquiry, is the fact, that "things *are* not what they *seem*." It is therefore one of the earliest results of reflective thought, to distinguish things as they really are from things as they appear to the senses. As the real nature of things is revealed by reason forcing us to go beyond their sensible appearance, the former comes to be distinguished as *that which is thought by reason* (*νοούμενον*) from *that which appears* (*φαίνομενον*). This antithesis is the most prominent feature of Eleatic thought. But the explanation of the antithesis remains a problem unsolved by the Eleatics. It is a knot which they cut rather than untie. They fancied the problem solved by the simple explanation, that *that which is demonstrated by reason—the noumenon—is the sole reality* (*τὸ ὄν*), while the sensible phenomenon is a non-entity (*τὸ μη ὄν*). But this is no solution of the problem. Sensible appearances *are* sensible appearances. They *exist* as such. Reason is therefore called to explain their existence, even if it be merely as sensible illusions. But reason cannot be satisfied with any explanation that is not based on a reasonable principle, that is, a principle in harmony with itself. Phenomena, therefore, and noumena, are to be explained on the same principle, and the Eleatic dualism vanishes in an inevitable monism.

Perhaps the first to see this clearly was Anaxagoras, and it is this fact that makes Aristotle speak of him as if he had uttered the first sensible word of a sober mind¹ on the problem of philosophy. Anaxagoras saw that every principle offered by earlier thinkers as explaining the essence of all things,—water, air, fire, earth, number, or whatever else it might be,—always implies something more primordial. For every such theory always appeals to reason in vindication of itself. The true principle, therefore, Anaxagoras held, must be reason. This is the ultimate explanation of all things. Accordingly, from this time forward it became impossible to leave

¹Οἰον νῆφων ἐφάνη is his striking phrase (*Metaph.* I., 3).

reason out in any attempt to give a reasonable account of the cosmos.

But naturally for man it is of prime interest to vindicate a rational unity in his own life rather than merely in the external world. In this direction no service has been rendered greater than that of the Stoics. No school has ever grasped more clearly the conception of all nature and all life as created and controlled by Perfect Reason. In fact the conception of nature (*φύσις*) was itself elevated and expanded. Prior to the Stoics the term had been mainly used, as it is perhaps mainly used still, in reference to the external material world. It was the Stoics who seem to have first applied the term to the phenomena of man's internal life; so that his moral nature and the nature of the external world came to be represented as governed by the same laws, and these the laws of Perfect Reason. Natural law, therefore,—the law of nature,—was no longer conceived as merely the mode of operation in the physical world. Henceforth it came to be thought of rather as that unalterable principle of consummate reason which finds its highest expression in the laws of man's moral life, and its lower expressions in the laws of the physical world.¹

But in spite of this apparently all-absorbing rational monism an unfortunate dualism crops out in the Stoical system. It is the old dualism of sense and reason, which had been the prominent feature of Eleatic philosophy. No longer, however, does it signalise an antithesis in our views of nature in general; it is specially centred upon an antagonism in man's moral life, which is declared to be irreconcilable. Following Plato and Aristotle, the Stoics divided off the sensibility with its passions as a function of the soul's life totally distinct from, and even opposed to, reason. Passion, for the Stoic, became explicitly what it was implicitly for Plato and Aristotle, an embodiment of the abstract essence of irrationality—

¹ Perhaps the most interesting development of the Stoical doctrine of the law of nature was in Roman jurisprudence. The later jurists of Rome, who were generally Stoics in speculation, fancied that the law of nature was to be found in their own *Jus Gentium*. The conjecture was quite unhistorical; but the Stoical theory of an ideal law of nature, which all human legislation ought to follow, exerted a beneficent influence on the jurisprudence of the empire.

τὸ ἄλογον. It is thus the moral enemy of those activities of reason which form the essence of rationality—*τὸ λογιστικόν*; and rationality, as we have seen, is, for the Stoic, the very essence of nature, the governing principle of all things. In its practical applications, therefore, the Stoical ethics would make no terms with passion; all kinds of sensibility must simply be suppressed. For the excellence—the virtue (*ἀρετή*)—of man is to be found only in a life that is in accordance with nature; and as reason is the essence of nature, a life in accordance with nature must be a life in accordance with reason. But a life that is to any extent controlled by sensibility, however gentle and amiable the sensibility may be, is to that extent irrational; and, therefore, the ideal of human excellence is a state of apathy in which life is completely controlled by passionless reason. As a result of this, Stoicism drew a painfully dualistic division between men, in its estimate of their actual characters. All men, in this estimate, must be either rational or irrational. That obvious intermingling of virtues and vices in actual life, which must be recognised in all just estimate of human character, was stubbornly ignored by the Stoic. For him that man is completely sunk in vice who indulges his passions to the slightest degree, just as—to use a common illustration—the man whose head is one foot under water is drowned as completely as the man who is covered by a thousand fathoms. No doctrine of the narrowest sectarianism in the Christian Church ever drew a harsher division between converted and unconverted.

The dualism of Stoical ethics has thus suggested the dualism which has corrupted Christianity. The indebtedness of Christian theology and ethics to the theology and ethics of Stoicism is a commonplace of intellectual history. The whole conception of the universe, as developed in the Christian doctrines of creation and providence, drew largely from the writings of the Stoics. This conception, which represents the universe as being in every nook and cranny under the ceaseless operation of Supreme Intelligence, might be supposed to exclude the very possibility of any irremovable dualism. Yet a painfully prominent dualism distorts the characteristic features of the Christian conception of the universe. It is in some

respects based on the old moral antagonism of sense and reason, in New Testament language, of the flesh and the spirit. The very excellence of Christian ethics tended to accentuate this antagonism. For by holding forth a peculiarly noble ideal of life as the fruit of the spirit, Christianity degraded into a more violent contrast the shortcomings of man's actual conduct, to which the flesh drags him down.¹ This deeper consciousness of sin, evoked by a higher conception of righteousness, has undoubtedly given a sharper antithesis to the ideas of God and Devil, of angel and demon, of heaven and hell, which make up a large portion of distinctively Christian thought. The grotesque imagery of horror which has been evolved out of this dread dualism, is indeed one of the most repulsive regions in the popular mythology of Christendom, yet it is not without a certain terrible fascination which has attracted the poets of Christendom to it as offering a fit material for the highest tragic art.

The source of a great deal of this imagery is still a problem for historical research. In the history of the subject prominence has not unnaturally been given to Manichæism. But the connexion of this system with Christianity has often been misunderstood. Manichæism is not properly a Christian heresy; that is to say, it did not spring out of the circle of Christian thought. It is not even to be regarded as a phase of Parseeism; for the Parsee creed is not, any more than the Christian, dualistic in its true interpretation. Manichæism indeed draws certain ideas from the Parsee creed as well as from the Christian; but in its essential drift it is independent of both. Recent researches seem to prove that Manichæism grew out of an old Babylonian religion modified by some elements of Parsee and of Christian thought, possibly of Buddhist as well.²

¹ It is worth noting also, that the extreme chiliasm of apocalyptic literature often pictures the present condition of the world as irredeemably irrational, to show in more brilliant relief the splendor of the expected millennium.

² See Kessler's *Untersuchungen zur Genesis des manichäischen Religionssystems* (1876), and his article in the *Real-Encyklopädie für protestantische Theologie und Kirche* (2d ed.). The older work of F. C. Baur, *Das manichäische Religionssystem* (1831), gives prominence to the influence of Buddhism.

Though Manichæism is thus to be considered as a religion outside of Christendom, it probably contributed, with the general Semitic influences which it represented, to accentuate the dualistic ideas of Christian demonology. The Devil of Christendom, though created by God, is still conceived as His successful enemy, marring the perfection of His work by a factor of evil which is maintained in existence, not only throughout the whole history of earth, but for ever afterwards in hell—irremovable by all the power of divine wisdom and love.

This influence of Manichæism upon Christianity seems to be implied in the prominence which it receives in the writings of Augustine, the man who did more than all the early thinkers of Christendom to shape the theological system of the Christian Church. It was in fact rather in Latin than in Greek theology that Christian thought tended to the dualistic conception of the antagonism between good and evil. Under the influence of the juridical ideas predominant in the Latin mind, the universe came to be conceived often after the analogy of the Roman Empire, and the Supreme Being mainly, if not exclusively, as an infinite monarch, whose laws must be vindicated at any cost. To minds dominated by such a conception of God it seems a sufficient vindication of divine law to inflict an infinite penalty on its violation,—a sufficient triumph of goodness if the will to evil is balked by banishment into some dim chaos of eternal suffering, beyond the confines of the divine cosmos. Such representations were extremely natural for minds to whom the problem of human life was mainly such jural organisation of society as it was the mission of the Roman people to work out. These representations are also, of course, useful in their place for popular illustration. But the concept of God, which they imply, is a very inadequate category on which to construct a philosophical theology. The finer speculative genius of the Greek Fathers was untrammelled by the peculiar concepts of Roman jurisprudence ; and therefore it is not surprising that Origen, the most brilliant of them all, shrank from an eschatology which did not ultimately eliminate hell, finding the true triumph of good only when all will to evil is finally subdued.

But the theology of Augustine, with all its dualism, became that of Western Christendom, and has continued to influence Western thought, both in and out of the Church, even to our day. His dualistic influence, like that of the Stoics, has been very marked in the separation of man's moral life into two mutually exclusive conditions or spheres. The state of nature and the state of grace are two concepts, the antithesis of which has been peculiarly distinct in all theological speculation moulded by Augustinian influences. The early history even of modern philosophy can scarcely be understood if we fail to note the fact that the Augustinian definition of these antithetical concepts formed a prominent subject of controversy about the dawn of modern speculation. In the Catholic Church Jansenism was substantially a revival of Augustinianism; and though the Jansenist doctrines were condemned by a papal bull enforced for political purposes by Louis XIV., yet they formed the creed of the finest minds in the Church of France. They were specially associated with the eminent men who lent the lustre of their learning and literary power, as well as of their piety, to the Oratory and Port Royal during the seventeenth century, and it is a fact of some import in the history of philosophy, that it was among these men that Descartes found his most enthusiastic disciples and his most brilliant expositors. In the Protestant section of Western Christendom, too, the essential drift of Augustinian teaching was revived in Calvinism; and Calvinism became the predominant phase of religious thought among the most distinctive representatives of the Protestant movement. It drew out all the passion of intellectual as well as of religious life among the Huguenots of France, among the Anti-Remonstrants of Holland, among the Puritans of England, Old and New.

But here, as often elsewhere in the history of human thought, extremes meet. For, while Jansenism and Calvinism represented the most intensely religious movements of human thought in the seventeenth century, on the other hand, in that century at least, probably speculation never took a more blankly anti-religious direction than in the philosophy of Hobbes. That philosophy is an attempt to construe all the phenomena of the universe, including the

phenomena of man's life, by eliminating all the essential ideas, not of religion only, but even of morality, and reducing nature to a play of purposeless, non-moral agencies. Hobbes's conception, therefore, of the state of nature in human life is fundamentally that of Calvinist and Augustinian. His cool, callous exposition of this concept—his description of man's natural state as a *bellum omnium contra omnes*, caused by all men being naturally actuated by egoistic impulses alone—all this is not only paralleled, but even exceeded, in its repulsiveness by the language of eminent Calvinistic divines.

A similar meeting of extremes is found in the comparison of Calvinism with another system of philosophy, which was almost as great a horror to orthodox thought as the system of Hobbes. The system of Spinoza seems indeed in many ways a complete contrast to that of the English philosopher. Yet beneath the apparent antithesis of the two systems there is a profound affinity. Though Spinoza starts with the idea of God, which is an adventitious adjunct to the system of Hobbes, yet his definition of the idea, reducing it to that of mere substance or being,¹ scarcely carries us beyond the agnostic concept of the Supreme Being, which is all that Hobbes allows. Moreover, Spinoza's identification of will and intelligence in God simply means that all we understand by intelligent activity disappears in mere will. The volition of God is therefore explicitly denied to be an act of purposive intelligence. Creation is a purposeless evolution of the eternal substance, a necessary modification of its attributes in accordance with its own irresistible laws. Under such a concept of creation there is no room left for independent activity or personal responsibility on the part of the finite individual. Consequently all the ideas of moral life are relegated by Spinoza among the illusions of "imaginatio," that is, the intellectual activity from which all error arises, and which is therefore carefully distinguished from the genuine knowledge to be attained only by *ratio* and by *scientia intuitiva*. As a result, Spinoza explicitly coincides with Hobbes in his conception of man's natural state. In this

¹ "Ens absolute infinitum, hoc est, substantiam, etc." Spinoza's *Ethics*, Part I., Def. 6.

state man is declared to be void of those ethical *imaginaciones* which grow only out of the soil of civil life.

The conception of nature by Hobbes and Spinoza was in a way thoroughly monistic ; but it attained this character only by confining the term to the lowest class of phenomena, and ignoring the phenomena of intelligent moral activity as artificial conventions of society. It requires no very subtle argument to show that, under this analysis, the obligations of social union themselves disappear. For if there is no obligation *a priori*—no obligation *in the very nature of things*—to observe a contract, then the so-called social contract itself is left without the support of any such obligation, and it simply remains a question whether the individual cannot outwit by superior astuteness, or resist by superior power, any governmental machinery that may be devised to enforce the contract. A similar issue is inevitable under Hobbes's analysis of religion. If the very nature of things, as unfolded by science, does not involve the essential ideas of religious life, then it is impossible to create a religion by artificial enactments of any civil authority. This fact is overlooked by Hobbes and by Comte as completely as by the agnostic champions of ultramontanism in the Church of Rome. It is not therefore surprising that Hobbes's philosophy of religion and morals should have met with strong opposition from men who were in earnest about the obligations of moral and religious life. Their opposition commonly took the form of a return to the larger and nobler conception of nature which had distinguished the ancient Stoics. A long line of writers, especially among the moralists of England, sought to trace, either in the nature of man or in external nature, if not in both, the foundations of his moral and religious life. Again the old Stoical conception of the law of nature became familiar in ethics and jurisprudence, and all positive enactments of human societies were viewed as merely imperfect embodiments of the law of nature. Accordingly men became accustomed to conceive the problems of moral and social activity as implying an endeavor to break through the artificial trammels by which civil society was cramping the life of man, and to get back to the simple requirements of nature, of natural law.

It is not difficult, and it is profoundly interesting, to see how this conception of life's problems represented the drift of the great historical movements by which last century was characterised. The claim of individual freedom against unreasonable restrictions of social law had become inevitable, partly under the trend of speculative thought, partly under the impulse of social conditions themselves. For never perhaps in the history of civilisation had human life entangled itself in such a complicated net-work of exacting regulations. Every sphere of man's activity from the highest to the lowest,—religion and literature, morality and etiquette, military and political and industrial life,—all were subjected to minute and often petty and even vexatious restrictions that prevented the natural and reasonable expansion of the human spirit which it was their proper function to develop. Never had the clothing of custom, in which of course human life must always invest itself, become so worn-out, so ill-adapted to the wants of growing humanity. The great revolution, which shattered the old life of Europe as the century closed, was an outburst of passionate impatience on the part of European society to get rid of its worn-out clothing before it had well considered in what fashion it was to be clothed anew.

This memorable movement is commonly regarded by historians as having found its most characteristic literary expositor in the writings of Rousseau. There we find the reactions against the social philosophy of Hobbes and Spinoza carried to its extreme. The contrast, which these philosophers had drawn between man's natural state and his civil state, is by Rousseau completely reversed. The state of nature he conceives to be one of innocent social equality, which has simply been corrupted by the artifices and restrictions and divisions which political institutions have introduced.

But the extravagance of this theory as well as of its opposite arises from the fact, that the state of nature, as defined by both, is a pure fiction of abstract thought. It is an attempt to conceive what man would be if we were to eliminate all those factors of his life which are derived from social organisation. It does not matter that in one case these factors are supposed to be the virtues by which human life is adorned, in the other the vices by which it is

corrupted. In either case the error is the same. It consists in taking a fictitious abstraction for a reality in nature. It ignores the only human reality that nature knows, that is, man living in the social state. The absolute solitary is not a natural man. As Aristotle said long ago, he is either a god or a brute.

It is evident then that all dualistic separations of man's life into spheres that are mutually exclusive originate in an imperfect conception of nature in general, but of man's nature in particular. This imperfection continues to mislead scientific inquiry. Human nature is still at times defined by concepts which imply a merely animal existence; and an attempt is made to interpret human actions simply as effects naturally resulting from impulses of pleasure or repulsions of pain. On such an interpretation of human life science must of course pronounce all morality of a spiritual or disinterested nature to be not only impossible as a matter of fact, but even incapable of any rational vindication. In like manner if nature in general is defined by similar narrow concepts, if nature is understood to mean the universe with all the rational purposes of human life eliminated, then it may be perfectly consistent to assert that there is no morality in nature, or even that nature is profoundly immoral. But the evolution of the universe with the history of man eliminated is the drama of Hamlet with the part of Hamlet left out. It is the life of man that at once forms the most essential part of the problem of all science, and furnishes the most essential data for its solution. The truth is, therefore, that scarcely one eminent thinker has fallen into this narrow conception of nature without at the same time protesting more or less explicitly against its inadequacy to satisfy the demands of scientific thought. More than one noble passage might be cited from recent literature, in which the scientific thinker rises to the part of a modern Prometheus, defying the non-moral omnipotence that he seems to see ruling in external nature, and asserting the power of man's internal nature to act upon a moral law of love in spite of any suffering which the non-moral laws of external nature may bring about as the result of his action. Nor is such Promethean assertion an abandonment of the scientific attitude of thought for an idle bravado of fancy. It is rather a rec-

ognition of the fact that there has always been in the universe a power adequate to sustain the man

“ Who trusted God was love indeed,
And love creation's final law,
Though nature, red in tooth and claw
With ravin, shrieked against his creed.”

Science therefore must give to the reality of this power a prominence equal to the reality claimed for the force of non-moral causation, and it can escape from an incomprehensible dualism only by advancing to a conception of nature, which embraces both in intelligible harmony.

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